REMARKS

I. Introduction

In response to the Office Action mailed June 18, 2004, Applicants have amended claims 16 and 17 in the manner suggested by the Examiner so as to address the pending objection. Claims 30-33 are added. Support for these amendments can be found, for example, in Figs. 1 and 2, and their corresponding section of the specification. No new matter has been added.

Further, Applicants note that the IDS disclosure filed on November 27, 2000 has not yet been considered by the Examiner. Accordingly, it is respectfully requested that the foregoing document be expressly considered during the prosecution of this application, and that the document be made of record therein. A copy of the IDS disclosure previously submitted and the corresponding PTO-1449 form are attached hereto. A returned signed form PTO-1449 to the Applicants is respectfully requested.

For the reasons set forth below, Applicants respectfully submit that all pending claims are patentable over the cited prior art references.

II. The Rejection Of Claims 1-6, 9-15, 18 and 19 Under 35 U.S.C. § 102

Claims 1-6, 9-15, 18 and 19 are rejected under 35 U.S.C. § 102 as being anticipated by USP No. 6,603,488 to Humpleman. Applicants respectfully traverse this rejection for at least the following reasons.

Claims 1, 2 and 3 recite in-part a network control system comprising a device that has a control code or a plurality of control codes corresponding to the display component, a controller that reads the display component and control code from the device and displays the read display component on a display screen, wherein the controller transmits the control code or a few control

codes out of said plurality of control codes corresponding to the display component and operation information of the user to the device when the user operates the display component on the display screen. Claim 13 recites in-part a controller characterized by reading a display component to configure an operation picture of a device and a control code corresponding to the display component from the device provided with a user interface and acting as an object to be controlled, and transmitting a control code corresponding to the display component and operation information of the user when the user operates said display component on the display screen.

In accordance with one embodiment of the present invention, when the user selects a display component displaying the device's function, the display/equipment function selecting means 14 of the controller transmits an ID serving as a control code of the display component together with the user's selected operation information. In particular, by manipulating the remote controller's keys, even when a selection button is released after the selection button is pushed down by the user, the ID of the display component and the user's operation information are transmitted to the device. In other words, when the individual button is pushed and released by the user, the user's operation information and the ID of the display component are sent to the device. In this process, operations such as "push," "release," or "push twice" of the button through the remote controller also represent other user's desired operation information. Furthermore, the user's operation information is coded and can be sent together with the display component's ID or that each respective piece can be sent as a command (a control code such as a display component's ID, or Program ID). Thus, because a display component's ID is used as a control code, and that a device's function is specified by combining a user's operation and a control code, a complicated operation can be indicated to the user in an easy-to-understand

manner with a minimal amount of displayed data, while displaying a plurality of functions with a controller having a small-sized display screen (see, page 24, line 27 to page 25, line 20 and page 48, lines 10-14 of the specification).

It is asserted in the pending rejection that Humpleman discloses that each home device supplies its own GUI through its own HTML files to the browser-based DTV 102 (alleged controller), where the browser-based DTV 102 provides a command and control interface for each of the home devices (alleged device) (see, page 3 of Office Action).

However, at a minimum, Humpleman does not disclose or suggest that *the controller* reads the *display component* and *control code* from the device, as recited by claims 1, 2 and 3. Indeed, contrary to the conclusion set forth in the pending rejection, as readily shown in Figs. 11 and 13, Humpleman discloses that when the user selects the device button 712 corresponding to, for example, Jim's DVD, **the session manager** *displays* the top-level home page 904 for the respective home device in a frame 708 of the session page 902. In other words, Humpleman specifically discloses utilizing ***the session manager*** *to read the functions of the selected home* device in the frame 708 *upon receiving the user's button selection* (in this case, "Jim's DVD" or Dad's TV 712). However, Humpleman is silent to utilizing the browser-based DTV 102 (alleged controller) to read the display component and control code of the home devices (see, col. 18, lines 1-7). Also, it does not appear that the browser-based DTV 102 is capable of reading any control code (e.g. program ID of a program, or ID of a display component), if any, from the home device.

Furthermore, at a minimum, Humpleman fails to disclose or suggest that the browser-based DTV transmits a control code corresponding to the display component. Indeed, Humpleman discloses that when the user selects a home device button 712, the session manager

obtains the particular capabilities of the selected home device. After obtaining the particular capabilities of the selected home device, the session manager searches the capabilities of the other home devices that are represented in the device link page 710 for any possible match that matches the particular capabilities of the selected home device (see, col. 16, lines 20-22 and lines 30-38). It is noted that if there is no capability found to match with the selected home device, the session manager deactivates the respective device button 712 in order that the user may not further select the respective device for the current session (see, col. 16, lines 38-43). In other words, Humpleman specifically discloses searching and matching capabilities of the first selected device with a second device via the session manager or the session server's home page (e.g., HTML) so as to perform a specific service between the first selected device and the matched second device (see, col. 19, lines 19-42), where unmatched devices are deactivated. As such, Humpleman does not disclose or suggest utilizing the first selected device to transmit a control code to the second device.

The Examiner asserts that the control code is inherent to the controlling of the home device. However, the Examiner's conclusion of inherency is without any evidentiary foundation because there is no evidence of record in Humpleman to support this finding by the Examiner. **Reliance on common knowledge does not discharge the Examiner's obligation to provide factual support for conclusions**. *In re Lee* , 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002). See also *In re Thrift*, 298 F.3d 1357, 63 USPQ2d 2002, (Fed. Cir. 2002).

Thus, at a minimum, Humpleman fails to disclose or suggest utilizing a controller for transmitting a control code corresponding to the display component of the device when the user operates the display component, as recited by claims 1 and 13.

Additionally, claims 2, 3, 11 and 12 recite in-part that the device has **a plurality of control codes corresponding to the display component**, while claims 2, 3, 14 and 15 recite in-part that the controller transmits **a few control codes out of the plurality of control codes** corresponding to the display component.

In accordance with one embodiment of the present invention, the device has a display component and a plurality of control codes against the display component, and by executing the device's function indicated by the display component according to the control code, a plurality of functions, such as a screen display or a device control, can be executed against a controller with a single display component, thereby enabling the user to execute a plurality of complicated commands in a single operation and making available a user-friendly operation picture (see, e.g., page 38, lines 19-25).

The Examiner asserts that Humpleman discloses "a macro of a sequence of commands that is saved in the memory on a home device and which can be accessed and executed by the user, as if the user actually selects a particular button or performs a particular action from within the HTML page contained on the respective home device (see, page 4, lines 11-16)." However, nowhere does Humpleman disclose or suggest that the home device has a plurality of control codes and upon reading the display component and control code, the browser-based DTV transmits portions of the plurality of control codes corresponding to the display component, as recited by the rejected claims, so that functions such as a screen display or a device control can be executed with a single display component.

Additionally, as discussed above, Humpleman does not discuss or even recognize transmitting any control code, let alone utilizing the browser-based DTV 102 (alleged controller) to transmit portions of the plurality of control codes to the home device. Thus, at a minimum,

Humpleman does not disclose or suggest that the device has a plurality of control codes corresponding to the display component, as recited by claims 2, 3, 11, and 12, or that the controller transmits a few control codes out of the plurality of control codes, as recited by claims 2, 3, 14 and 15.

With regard to claim 10, this claim recites a device comprising a control code corresponding to the display component, wherein the device executes the function indicated by the display component according to the control code received via the transmission line and operation information of the user.

The Examiner asserts that Humpleman discloses that the users select control options from the home page of each selected device in order to command and control the respective home device to function in a particular manner. However, at a minimum, Humpleman does not disclose or suggest that the device comprises a control code, where the device executes the function indicated by the display component according to the **control code received**. Indeed, nowhere does Humpleman disclose or suggest receiving any control code at the device end via the user, let lone executing the function indicated by the display component according to the control code received, as recited by claim 10. Thus, at a minimum, Humpleman does not disclose or suggest a device comprising a control code corresponding to the display component, wherein the device executes the function indicated by the display component according to the control code received via the transmission line and operation information of the user, as recited by claim 10.

With regard to claim 18, this claim recites in-part a controller that reads the operation picture data from the device, and displays an operation picture prepared by using the operation picture data by switching between operation pictures according to the operation of the user.

In accordance with one embodiment of the present invention, the controller first displays an operation picture of the function menu list corresponding to the first entry out of a plurality of menu entries existing in the device information list. Then the controller displays the operation screens corresponding to menu entries of the device information list by switching the screens with the use of a remote controller (e.g., menu button) in sequence (see, e.g., page 45, line 26 to page, line 2). In particular, the device has a plurality of operation picture data, each having a representation method different from what others have, and that the controller displays an operation picture on the display screen by switching from one operation picture to others according to the user's operation, thereby allowing the operation picture to be easily switched according to user's application and circumstances (see, e.g., page 46, lines 16-21).

The Examiner asserts that Humpleman discloses displaying a variation of image files representing different device states. However, in contrast to the conclusion set forth in the pending rejection, Humpleman specifically discloses that each home device connected to a home network contains an ICON image file, where the ICON image file is a file containing an image that represents the particular type of the corresponding home device (see, col. 10, lines 20-24). As such, it would appear that the foregoing elements are features of the alleged **device**, rather than characteristics of the **controller**, as recited by claim 19.

Even assuming that the foregoing characteristic asserted by the Examiner is relevant to the alleged controller, nowhere does Humpleman disclose or suggest that the browser-based DTV (alleged controller) reads operation picture data from the home device (alleged device) and displays an operation picture prepared by using the operation picture data of the home device by **switching** between operation pictures according to **user's operation**. Thus, at a minimum, Humpleman fails to disclose or suggest a controller that reads the operation picture data from the

device, and displays an operation picture prepared by using the operation picture data by switching between operation pictures according to the operation of the user, as recited by claim 18.

With regard to claim 19, this claim recites in-part a controller characterized by reading a plurality of operation picture data from the device provided with an user interface and acting as an object to be controlled, producing a selection picture for selecting the plurality of operation screens from the operation picture data, and displaying the selection picture.

The Examiner asserts that each home device supplies its own GUI through its own HTML files to the browser-based DTV 012, where each home device contains an ICON image file for displaying variation of images files representing different device states. As such, it would appear that the foregoing elements are features of the alleged **device**, rather than characteristics of the **controller**, as recited by claim 19.

Additionally, nowhere does Humpleman disclose or suggest producing a selection picture for selecting the plurality of operation screens from the operation picture data of the device, as recited by claim 19.

As anticipation under 35 U.S.C. § 102 requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference, *Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983)*, and at a minimum, Humpleman fails to disclose the foregoing claim elements, it is clear that Humpleman does not anticipate claim 1, 2, 3, 10, 11, 12, 13, 14, 15, 18, 19 or any of the claims dependent thereon.

III. The Rejection Of Claim 16 Under 35 U.S.C. § 102

Claim 16 is rejected under 35 U.S.C. § 102 as being anticipated by WO 97/49057 to Iwamura. Applicants respectfully traverse this rejection for at least the following reasons.

Claim 16 relates to an AVC system formed by connecting via a transmission line at least two or more of equipment that handles any one or more of data on video, audio or information with at least a controller and a device included in the two or more of equipment, a device characterized by having an identification information memory area to store identifying information, whereby the device is identified by the user, receiving data of a display component, whereby the user identifies designated equipment, and storing data of the display component as the identifying information in the identification information memory area.

In accordance with one embodiment of the present invention, the device has an identification information memory area for storing the identifying information, whereby the user identifies the device, and the device receives data of the display component for identifying the equipment designated by the user, The device then stores the data in the identification information memory area, thereby allowing the device to have the user's desired image or nickname attached to the device, allowing each respective device to be recognized easily even when a plurality of devices of the same kind are connected together, and configuring an operation picture according to the user's desire (see, e.g., page 40, lines 9-17 of the specification).

The Examiner asserts that the claim limitations "having an identification information memory area to store identifying information, whereby said device is identified by the user" and "storing data of said display component as said identifying information in said identification

information memory area" are satisfied, because Iwamura discloses storing a connection map or a topology map in the external RAM including display components.

However, at a minimum, Iwamura does not disclose or suggest that **the *device* can store data of the display component** as the identifying information in the identification information memory area, as recited by claim 16. Indeed, in contrast to the conclusion set forth in the Office Action, Iwamura merely discloses that in response to a user's command, the CPU 182 of DSS IRD 101 constructs a connection map or a topology. Nowhere does Iwamura discuss or even mention that the individual device is capable of storing data of the display component as the identifying information. Instead, Iwamura only discloses utilizing the **connection map** for storing the data of the display component.

As anticipation under 35 U.S.C. § 102 requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference, *Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983)*, and at a minimum, Iwamura fails to disclose the foregoing claim elements, it is clear that Iwamura does not anticipate claim 16.

IV. The Rejection Of Claims 7 and 8 Under 35 U.S.C. § 103

Claims 7 and 8 are rejected under 35 U.S.C. § 103 as being unpatentable over Humpleman. Applicants respectfully traverse this rejection for at least the following reasons.

Claim 7 recites that the display component is a program including a display element, while claim 8 recite that the control code is a program ID of a program.

In accordance with the present invention, the display component refers to a still picture data of control buttons of the equipment, a character data (text data) indicating functions, an

audio data such as sound effects, a program code including such display components as a still picture data, or icons. More specifically, a control code can be configured by a number assigned to each respective kind of device's function and a serial number in each respective kind of device's function or configured by a unique control code used in the device to thereby facilitate the provision of each respective function of the device. In the case of a program, in which a display component includes a display element such as a still picture data, the ID of the program can be used as the control code. By having a display component formed of a program that includes display elements, the representation at the time of displaying can be made full of varieties, thereby making a user-friendly display available (see, e.g., page 7, lines 22-27, page 11, line 26 to page 12, line 5 and page 48, line 30 to page 49, line 2 of the specification).

The Examiner asserts that Humpleman discloses "a home network program guide including electronic television program guide," but admits that Humpleman does not disclose or suggest "tuning television according to the program ID's associated with the disclosed program guide." The Examiner then relies on Official Notice to cure this deficiency.

However, it would appear that the Examiner misinterprets the claimed "program including a display element" as simply a television program guide. Indeed, in accordance with this embodiment of the present invention, the display component is in a form of still picture data, text data or icons of the control buttons of the equipment, and that the device executes the function indicated by the corresponding display component. In an event that the display component includes a display element such as a still picture data, the ID of the program can be used as the control code corresponding to the display component.

In contrast, nowhere does Humpleman disclose or suggest that the alleged display component is a program including a display element, or that the control code, if any, is a program ID, as recited by claim 7 and 8, respectively.

Thus, as each and every limitation must be either disclosed or suggested by the cited prior art in order to establish a *prima facie* case of obviousness (see, **M.P.E.P. § 2143.03**), and Humpleman fails to do so, it is respectfully submitted that claims 7 and 8 are patentable over the prior art.

V. The Rejection Of Claim 17 Under 35 U.S.C. § 103

Claim 17 is rejected under 35 U.S.C. § 103 as being unpatentable over Iwamura. Applicants respectfully traverse this rejection for at least the following reasons.

Claim 17 recites in-part a device characterized by: having an identification information memory area to store display components of a plurality of kinds, whereby the device is to be identified by the user, and a flag to identify the display component of a plurality of kinds selected by the user, receiving the flag of the display component selected by the user, and storing the flag of the display component in the identifying information memory area.

In accordance with one embodiment of the present invention, the user identifies the device, and the device stores a plurality of display components in the identification information memory area, and a flag for identifying a display component of user's selection. Specifically, the device receives the flag of the display component selected by the user, and then stores the display component in the identification information memory area according to the flag, thereby allowing the device to have an user's desired image or a nickname, allowing each respective device to be recognized easily even when a plurality of devices of the same kind are connected

while permitting an operation picture to be configured according to the user's desire (see, e.g., page 49, lines 18-30 of the specification).

The Examiner asserts that Iwamura discloses storing a connection map or a topology map in the external RAM. However, in contrast to the conclusion set forth in the pending rejection, nowhere does Iwamura disclose or suggest storing a flag to identify the display component of a plurality of kinds selected by the user, or receiving the flag of the display component selected by the user, as recited by claim 17.

Indeed, Iwamura does not even discuss recognizing each respective device when a plurality of devices of the same kind are connected, nor does the device receive the flag of the display component selected by the user. In contrast, Iwamura merely discloses using the CPU 182 of DSS IRD 101 to generate commands through the network 100 for controlling the device so as to response to the user's selection (see, page 14, lines 18-28). In other words, the alleged device does not receive any flag of the display component selected by the user, but rather, the CPU 182 receives the commands generated by the user, and responds by sending commands to the device. Thus, at a minimum, Iwamura fails to disclose or suggest storing a flag to identify the display component of a plurality of kinds selected by the user, receiving the flag of the display component selected by the user, as recited by claim 17.

It should also be recognized that the fact that the prior art could be modified so as to result in the combination defined by the claims at bar would not have made the modification obvious unless the prior art suggests the desirability of the modification. *In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986).*

Moreover, recognizing after the fact that such a modification would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a

conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness. *In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).*

It is only Applicants' disclosure that discloses the foregoing device. Neither Humpleman or Iwamura disclose or suggest such a deice. Thus, the only motivation of record for the proposed modification of the alleged device of Iwamura to arrive at the claimed invention is found in Applicants' disclosure which, of course, may not properly be relied upon to support the ultimate legal conclusion of obviousness under 35 U.S.C. § 103. *Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 2271 USPQ2d 1593 (Fed. Cir. 1987).*

As each and every limitation must be either disclosed or suggested by the cited prior art in order to establish a *prima facie* case of obviousness (see, **M.P.E.P. § 2143.03**), and Iwamura fails to do so, it is respectfully submitted that claim 17 is patentable over the prior art.

VI. All Dependent Claims Are Allowable Because The Independent Claims From Which They Depend Are Allowable

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co., 819 F.2d at 1100, 1108 (Fed. Cir. 1987).* Accordingly, as independent claims 1, 2, 3 and 10-19 are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also in condition for allowance.

For all of the foregoing reasons, it is respectfully submitted that the rejections of claims 1-6, 9-16, 18 and 19 under 35 U.S.C. § 102, and claims 7, 8 and 17 under 35 U.S.C. § 103 have been overcome.

Furthermore, it does not appear that Humpleman or Iwamura, taken alone or in combination, discloses or suggests the claim elements recited by new claims 30-33. Thus, it is respectfully submitted that claims 30-33 are patentable over the cited prior art.

VII. Conclusion

Accordingly, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

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